

CLAIMS

1. A solenoid valve adapted such that a fixed core located in a wound coil and protruding downward from the wound coil, a plunger is supported under the fixed core by a plate spring and holds a valve sheet which is normally retained in contact with a valve seat by spring force of the plate spring, and the valve sheet is separated from the valve seat against the spring force of the plate spring when the coil is energized, wherein

the fixed core comprises two parts vertically coupled, an upper one of which is a first fixed core located in a coil bobbin around which the coil is wound and in non-contact with a control fluid, the first fixed core being made of a material having high magnetic permeability, and a lower one of which is a second fixed core fitted, protruding downward, in the coil bobbin to cover a lower end of the coil bobbin, the second fixed core being made of a material having corrosion resistance to a high-corrosive control fluid.

2. The solenoid valve according to claim 1, wherein the first fixed core is made of magnetic soft iron.

3. The solenoid valve according to claim 1 or 2, wherein the second fixed core is made of ferritic stainless steel.